

Appendix E

Historical Rainfall Data at Zuma Beach Meteorological Station from 1948 to 2010

Storm Year ¹	Rain Days ²	Percentile	Storm Year ¹	Wet Days ³	Percentile	Storm Year ¹	Rain (in)	Percentile	Storm Year ¹	Dry Days ⁴	Percentile
1998	47	100.0%	1998	116	100.0%	1998	36.42	100.0%	1968	360	100.0%
1983	44	98.3%	1983	105	98.3%	1995	31.07	98.3%	1961	337	98.3%
1978	39	96.7%	1978	84	96.7%	2005	30.04	96.7%	1959	336	96.7%
2005	38	95.1%	1993	83	95.1%	1983	29.85	95.1%	1970	334	93.5%
1995	36	93.5%	2005	82	93.5%	1952	26.93	93.5%	1972	334	93.5%
1993	32	91.9%	1969	79	90.3%	1978	25.79	91.9%	1990	329	91.9%
1969	31	90.3%	1995	79	90.3%	1969	24.48	90.3%	1964	326	90.3%
1973	30	87.0%	1973	78	88.7%	1986	24.02	88.7%	1966	323	88.7%
1979	30	87.0%	1999	76	87.0%	1993	22.74	87.0%	1960	321	87.0%
1980	29	85.4%	1952	75	80.6%	1958	22.6	85.4%	1981	320	85.4%
1992	28	83.8%	1958	75	80.6%	1962	22.44	83.8%	1991	318	83.8%
1967	27	79.0%	1979	75	80.6%	1980	21.42	82.2%	2001	317	80.6%
1974	27	79.0%	1982	75	80.6%	1992	21.07	80.6%	2008	317	80.6%
1999	27	79.0%	1974	74	79.0%	1971	19.03	79.0%	1948	316	79.0%
1975	26	74.1%	1996	71	77.4%	2003	17.79	77.4%	1950	315	77.4%
1982	26	74.1%	1975	70	75.8%	1979	17.5	75.8%	1977	314	74.1%
2006	26	74.1%	1949	69	74.1%	1973	17.2	74.1%	1989	314	74.1%
1965	25	70.9%	1963	68	70.9%	1956	16.9	72.5%	1987	313	72.5%
1996	25	70.9%	1994	68	70.9%	1966	16.58	70.9%	1997	312	70.9%
1952	24	66.1%	1967	67	67.7%	1965	16.55	69.3%	1954	311	67.7%
1971	24	66.1%	2006	67	67.7%	1954	16.42	67.7%	1956	311	67.7%
2000	24	66.1%	2010	66	66.1%	1997	15.68	66.1%	1988	310	59.6%
1949	23	56.4%	1951	65	64.5%	2010	15.52	64.5%	2002	310	59.6%
1958	23	56.4%	1955	64	58.0%	1974	15.45	62.9%	2004	310	59.6%
1962	23	56.4%	1971	64	58.0%	2000	14.98	61.2%	2007	310	59.6%
1986	23	56.4%	1986	64	58.0%	2006	14.88	59.6%	2009	310	59.6%
1997	23	56.4%	1992	64	58.0%	1963	14.33	58.0%	1976	308	56.4%
2010	23	56.4%	1957	63	54.8%	1996	13.75	56.4%	1985	308	56.4%
1988	22	53.2%	1984	63	54.8%	1967	13.36	54.8%	1980	307	53.2%
2001	22	53.2%	1965	62	53.2%	1975	12.84	53.2%	2003	307	53.2%
1963	21	48.3%	1962	61	50.0%	1955	12.55	51.6%	1953	305	50.0%
1976	21	48.3%	2000	61	50.0%	1950	12.23	50.0%	2000	305	50.0%
2003	21	48.3%	1953	60	48.3%	2001	12.14	48.3%	1962	304	48.3%
1957	20	40.3%	1980	59	46.7%	2008	12.11	46.7%	1965	303	45.1%
1984	20	40.3%	1976	58	43.5%	1988	11.98	45.1%	1984	303	45.1%
1994	20	40.3%	2003	58	43.5%	1982	11.5	43.5%	1957	302	41.9%
2004	20	40.3%	1985	57	41.9%	1957	11.27	41.9%	1992	302	41.9%
2009	20	40.3%	1988	56	38.7%	1976	11.26	40.3%	1955	301	37.0%
1951	19	33.8%	2004	56	38.7%	1999	11.18	38.7%	1971	301	37.0%
1956	19	33.8%	1956	55	32.2%	1994	10.91	37.0%	1986	301	37.0%
1987	19	33.8%	2002	55	32.2%	1991	10.9	35.4%	1951	300	35.4%
2008	19	33.8%	2007	55	32.2%	1977	10.75	33.8%	2010	299	33.8%
1953	18	25.8%	2009	55	32.2%	1985	10.5	32.2%	1967	298	30.6%
1955	18	25.8%	1954	54	30.6%	2004	10.38	30.6%	2006	298	30.6%
1966	18	25.8%	1997	53	29.0%	1949	10.26	29.0%	1963	297	27.4%
1977	18	25.8%	1987	52	27.4%	1953	10.23	27.4%	1994	297	27.4%
1991	18	25.8%	1977	51	24.1%	1960	10.02	25.8%	1949	296	25.8%
1960	17	19.3%	1989	51	24.1%	1970	9.83	24.1%	1975	295	22.5%
1985	17	19.3%	1948	50	20.9%	1951	9.63	22.5%	1996	295	22.5%
1989	17	19.3%	1950	50	20.9%	1981	9.54	20.9%	1952	291	19.3%
2007	17	19.3%	2008	49	19.3%	1984	9.51	19.3%	1974	291	19.3%
1954	16	17.7%	2001	48	17.7%	2009	9.13	17.7%	1958	290	14.5%
1948	15	12.9%	1991	47	16.1%	1987	9.1	16.1%	1979	290	14.5%
1981	15	12.9%	1960	45	12.9%	1964	7.69	14.5%	1982	290	14.5%
2002	15	12.9%	1981	45	12.9%	1972	7.38	12.9%	1999	289	12.9%
1950	14	6.4%	1966	42	11.2%	2002	7.2	11.2%	1973	287	11.2%
1964	14	6.4%	1964	40	9.6%	1989	7.02	9.6%	1969	286	8.0%
1970	14	6.4%	1990	36	8.0%	1948	6.77	8.0%	1995	286	8.0%
1972	14	6.4%	1972	32	6.4%	2007	6.56	6.4%	2005	283	6.4%
1990	12	4.8%	1970	31	4.8%	1959	6.48	4.8%	1993	282	4.8%
1959	9	1.6%	1959	29	3.2%	1961	5.09	3.2%	1978	281	3.2%
1961	9	1.6%	1961	28	1.6%	1990	4.91	1.6%	1983	260	1.6%
1968	2	0.0%	1968	6	0.0%	1968	0.46	0.0%	1998	249	0.0%